

Question Book Serial No. MAT0000642 DRS-2015 Question Booklet Series Code: B

Time Allowed: 01.30 hours

Full Mark: 100

ନିର୍ଦ୍ଧାରିତ ସମୟ : ୩୦ ୧.୩୦ମିନିଟ୍

ମୋଟ ମାର୍କ : ୧୦୦

Read the following instructions carefully before you begin to answer the questions. This Booklet contains 100 questions with multiple choice answers both in English and Odia language. In case of discrepancy in meaning, the English version will prevail.

ପ୍ରଶ୍ନ ଗୁଡ଼ିକର ଉଭର କରିବା ପୂର୍ବରୁ ନିମ୍ନ ପ୍ରଦର ନିର୍ଦ୍ଦେଶାବଳୀ ଯଦ୍ବୁ ସହକାରେ ପଢନ୍ତୁ । ଏହି ପୁସ୍ତିକାରେ ୧୦୦ ଟି. ବିବିଧ ଉଭର ଯୁକ୍ତ ପ୍ରଶ୍ନ ଉଭୟ ଜୀବାଜୀ ଓ ଡେଇଆ ଭାଷାରେ ଦିଆଯାଇଥାଇ । ଅର୍ଥବୋଧରେ କିଣ୍ଠି ତାରତମ୍ୟ ଧୂଲେ ଜୀବାଜୀ ଭାଷାର ଅର୍ଥ ବଳବତ୍ତର ରହିବ ।

INSTRUCTIONS FOR CANDIDATES	ପ୍ରାର୍ଥୀ/ପ୍ରାର୍ଥୀନୀ ମାନଙ୍କପାଇଁ ନିର୍ଦ୍ଦେଶାବଳୀ
<p>1. This Booklet contains in all 100 questions with multiple choice answers.</p> <p>2. All questions are compulsory and carry equal mark.</p> <p>3. Before answering any question, checkup this Booklet and ensure that it contains 20 pages and no page is missing, mutilated or repeated. In case of any defect replace it immediately.</p> <p>4. The Invigilator shall supply you the bank OMR Answer Sheet separately. Enter your Roll Number, Question Booklet Serial Number and Question Booklet Series Code and darken the corresponding circle/oval provided on left side of the Answer Sheet carefully by black/blue ball point pen only. You must write the name, date and center of examination and put your full signature in the appropriate spaces provided therein before answering any question.</p> <p>5. A machine will read the coded information furnished by you in the OMR Answer Sheet. If the information so furnished by you are incomplete or different from what have been given in the application form, you will be awarded Zero mark.</p> <p>6. These instructions must be complied with fully failing which your Answer Sheet will not be evaluated and Zero mark will be awarded.</p> <p>7. Answer must be given by completely blackening one of the four circles/ovals representing the correct answer given on right side of the Answer Sheet corresponding to the relevant question number by using Black/Blue ball point pen only. Answers not shown by black/blue ball point pen shall not be awarded any mark.</p> <p>8. Failure to hand over the Answer Sheet to the Invigilator before leaving the examination hall/room will make you liable to penal action.</p> <p>9. Read carefully the instructions of answering each question before answering it.</p> <p>10. Answer the questions as quickly and carefully as you can. Some questions may be easy and others difficult. Don't spend too much time on any question.</p> <p>11. No Rough work has to be done on the OMR Answer Sheet. Space for rough work has been provided below the questions wherever needed.</p> <p>12. You must not carry into the examination hall/ room any book, mobile phones or electronic devices printed/handwritten papers except the Admission Letter.</p> <p>Failure to comply with any of the above instructions will be considered as using unfair means and action as deemed proper will be taken against the violators.</p>	<p>୧. ଏହି ପୁସ୍ତିକାରେ ନିମ୍ନମାତ୍ରରେ ମୋଟ ୧୦୦ ଟି. ବିବିଧ ଉଭର ଯୁକ୍ତ ପ୍ରଶ୍ନ ଅଛି ।</p> <p>୨. ସମୀକ୍ଷା ପ୍ରଶ୍ନ ବାଧାମୂଳକ ଏବଂ ପ୍ରତ୍ୟେକର ମାର୍କ ସମାନ ।</p> <p>୩. କୌଣସି ପ୍ରଶ୍ନର ଉଭରଦେବା ଆଗରୁ ପୁସ୍ତିକାରେ ନିର୍ଦ୍ଦେଶାବଳୀ ଅର୍ଥରେ ୨୦ ଟି ପ୍ରଶ୍ନା ଅଛି ଓ କୌଣସି ପ୍ରଶ୍ନା ଆଗରୁ ପୁସ୍ତିକାରେ ହୋଇଲାହି । କୌଣସି ପ୍ରଶ୍ନର ଉଭର ଯୁକ୍ତ ବଦଳ କରାର ନିଅନ୍ତ୍ର ।</p> <p>୪. ପରୀକ୍ଷା ଆପଣଙ୍କ ସ୍ଵତନ୍ତ୍ରରେ ଓେମାର ଉଭରପର୍ବତ୍ତ ଦେବେ । ଉଭରପର୍ବତ୍ ବାମ ପାର୍ଶ୍ଵରେ ଯଥା ଆଗରେ ଆପଣଙ୍କ ଗୋଲନ୍ତୁର, ପ୍ରଶ୍ନପ୍ରତିକା କ୍ରମିକ ନମ୍ବର ଏବଂ ପ୍ରଶ୍ନପ୍ରତିକା ବିଚିଜ କୋର୍ଟ ଉଭରଦେବା କରନ୍ତୁ ଏବଂ ଅନୁରୂପ ବୃତ୍ତ/ଅଣ୍ଟାକ୍ରିଟିକ୍ କେବଳ କଳ/ନାଳ କାଲିର ବଳପଥ୍ୟ ପେନ ଦ୍ୱାରା କାଲି କରନ୍ତୁ । ଏଠାରେ ପ୍ରଦର ନିର୍ଦ୍ଦେଶ ଆଗରେ ପରାକ୍ଷାର ନାମ, ଜରିଖ ଓ କେନ୍ଦ୍ର ନିର୍ଦ୍ଦେଶ ଭାବେ ଲେଖନ୍ତୁ ଏବଂ କୌଣସି ପ୍ରଶ୍ନର ଉଭରଦେବା ଆଗରୁ ଆପଣଙ୍କ ପୁରା ଦର୍ଶକର ବିଅନ୍ତ୍ର ।</p> <p>୫. ଓେମାର ଉଭରପର୍ବତ୍ରେ ଆପଣ ଉଭରଦେବା କରିଥିବା ବାକେଟିକ ତଥ୍ୟକୁ ଗୋଟିଏ ଯତ୍ନ ପଠନ କରିବ । କେଣ୍ଟୁ ଆପଣଙ୍କ ଏହି ପ୍ରଦର ଯଥେ ଯଦି ଉଭରାକୁ ଉଭର ଦିଆଯାଇଥିବା ଦଥ୍ୟାରୁ ପରକ କିମ୍ବା ଅପ୍ରକଟିତ କ୍ଷେତ୍ର ଏବଂ ଅନୁରୂପ ବୃତ୍ତ/ଅଣ୍ଟାକ୍ରିଟିକ୍ କେବଳ କଳ/ନାଳ କାଲିର ବଳପଥ୍ୟ ପେନ ଦ୍ୱାରା କାଲି କରନ୍ତୁ ।</p> <p>୬. ଏହି ନିର୍ଦ୍ଦେଶାବଳୀ ଏବଂ ପ୍ରଶ୍ନର ନିର୍ଦ୍ଦେଶ ମାର୍କ ପ୍ରଦାନ କରାଯିବ ।</p> <p>୭. ଏହି ନିର୍ଦ୍ଦେଶାବଳୀ ଏବଂ ପ୍ରଶ୍ନର ନିର୍ଦ୍ଦେଶ ମାର୍କ ପ୍ରଦାନ କରାଯିବ ।</p> <p>୮. ଉଭରପର୍ବତ୍ର ଭାଷାର ପାର୍ଶ୍ଵରେ ଥିବା ପ୍ରକଟ ପ୍ରଶ୍ନ ଏବଂ ପ୍ରଶ୍ନର ନିର୍ଦ୍ଦେଶ ମାର୍କ ପ୍ରଦାନ କରାଯିବ ।</p> <p>୯. ଉଭରପର୍ବତ୍ର ଭାଷାର ପାର୍ଶ୍ଵରେ ଥିବା ପାର୍ଶ୍ଵର ନିର୍ଦ୍ଦେଶ ମାର୍କ ପ୍ରଦାନ କରାଯିବ ।</p> <p>୧୦. ପରୀକ୍ଷା ହଜ/କୋଠୀରୁ ଛିଟିବା ପୂର୍ବରୁ ଆପଣ ଉଭରପର୍ବତ୍ତ ପରୀକ୍ଷକରୁ ହେବେ ।</p> <p>୧୧. ଉଭର ଦେବାପୂର୍ବରୁ ପ୍ରତ୍ୟେକ ପ୍ରଶ୍ନର ନିର୍ଦ୍ଦେଶାବଳୀ ଯଦ୍ବୁ ସହକାରେ ପଢନ୍ତୁ ।</p> <p>୧୨. ଯେବେଳେ ଶାକ୍ ଏବଂ ଯତ୍ନ ସହକାରେ ପାରିବେ ପ୍ରଶ୍ନପ୍ରତିକର ଉଭର ବିଅନ୍ତ୍ର । କେବେଳ ପ୍ରଶ୍ନ ଏବଂ ଅନ୍ୟ କୋଣସି ଉଭରର ନିର୍ଦ୍ଦେଶ ମାର୍କ ପ୍ରଦାନ କରାଯିବ ।</p> <p>୧୩. ଓେମାର ପତ୍ର ବାହୀରେ କୌଣସି ବାହୀରେ କାଗଜ, ମୋବାଇଲ ଫୋନ୍ ପୋଡ଼ କିମ୍ବା ବୈଦ୍ୟୁତିକ ଉପରେ ଆପଣ ପରାକ୍ଷା ହଜ/କୋଠୀରୁ ଭିତରକୁ ନେଇ ପାରିବେ ନାହିଁ ।</p> <p>୧୪. ଉଭରପର୍ବତ୍ର ଭାଷାର ପାର୍ଶ୍ଵରେ ଥିବା ପାର୍ଶ୍ଵର ନିର୍ଦ୍ଦେଶାବଳୀ କାଗଜ, ମୋବାଇଲ ଫୋନ୍ ପୋଡ଼ କିମ୍ବା ବୈଦ୍ୟୁତିକ ଉପରେ ଆପଣ ପରାକ୍ଷା ହଜ/କୋଠୀରୁ ଭିତରକୁ ନେଇ ପାରିବେ ନାହିଁ ।</p> <p>୧୫. ଉଭରପର୍ବତ୍ର ଭାଷାର ପାର୍ଶ୍ଵରେ ଥିବା ପାର୍ଶ୍ଵର ନିର୍ଦ୍ଦେଶାବଳୀ କାଗଜ, ମୋବାଇଲ ଫୋନ୍ ପୋଡ଼ କିମ୍ବା ବୈଦ୍ୟୁତିକ ଉପରେ ଆପଣ ପରାକ୍ଷା ହଜ/କୋଠୀରୁ ଭିତରକୁ ନେଇ ପାରିବେ ନାହିଁ ।</p>



ARITHMETIC

2. The ratio of two numbers is 5:4. If 40% of the first number is 12, what will be 50% of the second number?
(A) 12 (B) 14 (C) 15 (D) 18

ଦୁଇଟି ସଂଖ୍ୟାର ଅନୁପାତ 5:4 । ଯଦି ପ୍ରଥମ ସଂଖ୍ୟାର 40% 12 ହୁଁ, ତେବେ ଦ୍ୱିତୀୟ ସଂଖ୍ୟାର 50% କେତେ ହେବା?

3. The ratio of two numbers are 3:5. If, 10 is added in each number, the new ratio becomes 5:7. Then find out the smaller number?

(A) 9 (B) 12 (C) 15 (D) 25

ଦୁଇଟି ସଂଖ୍ୟାର ଅନୁପାତ 3: 5 । ଯଦି ପ୍ରତ୍ୟେକ ସଂଖ୍ୟାରେ 10 ଯୋଗ କରାଯାଏ, ନୂତନ ସଂଖ୍ୟା ହୁଏଇର ଅନୁପାତଟି 5: 7 ହୁଏ । ତେବେ ସାମ ସଂଖ୍ୟାଟି କେତେ ?

15:25
35

ପାଞ୍ଜାବ ସିନ୍ହା ମେଲାର ଦେଶୀକଣ ଅନୁଷ୍ଠାନିକ ପାତ୍ର

ଦୁଇ ଅଙ୍କ ବଶିଷ୍ଟ ସବୁଠାରୁ ବଡ଼ ମୋଳକ ସଂଖ୍ୟାଟ କେତେ ?
(A) 22

(A) 93 **(B) 97** (C) 89 (D) 79

$$\sqrt[5]{\sqrt[3]{27} \times \sqrt[3]{-2744}} = \underline{\hspace{2cm}} ?$$

(A) -52 (B) -42 (C) -32 (D) -24

$$\sqrt[3]{27} \times \sqrt[3]{-2744} = \text{ಕೆಡೆ ಹೇಬ್?}$$

6. $\sqrt[3]{-1728 \times 15625} = \underline{\hspace{2cm}}$?
(A) -180 (B) -240 (C) -280 (D) -300

$$\sqrt[3]{-1728 \times 15625} = \text{କେତେ ହେବ?}$$

7. What is the difference between the positional values of 6 in the number 964362?
(A) 59940 (B) 5994400 (C) 5994 (D) None of these

$$\begin{array}{r} 60000 \\ - 60 \\ \hline 59940 \end{array}$$

964362 ରେ '6' ର ସ୍କାନ୍‌ୟ ମାତ୍ର ମଧ୍ୟରେ ଅଛିର ଜେତୁ?

8. The length of a rectangle is increased by 20% and the width is decreased by 20%. The area decreases by _____.

ଗୋଟିଏ ଆୟତନକୁ ଦିର୍ଘ୍ୟ ଶତକତା 20% ବଜାଗଲା ଏବଂ ପ୍ରସ୍ତୁତ ଶତକତା 20 କମାଗଲା । ତେବେ ଏହାର କ୍ଷେତ୍ରଫଳ କେତେ କମିଲା ?

ARITHMETIC

9. The proportion of 2 numbers is 10:1 and their sum is 1188. What is the number?

(A) 18 (B) 108 (C) 81 (D) 28

$$\begin{array}{r} 111188 \\ \underline{\times 11} \\ 1188 \end{array}$$

2

ଦୁଇ ସଂଖ୍ୟାର ଅନୁପାତ 10:1 ଓ ସେମାନଙ୍କର ଯୋଗଫଳ 1188 ହେଲେ, ସଂଖ୍ୟାଟି କେତେ ?

(A) 18 (B) 108 (C) 81 (D) 28

10. What times of H.C.F is the L.C.M of 48, 36, 72 & 24?

(A) 6 (B) 12 (C) 18 (D) 24

$$\begin{array}{r} 18, 36, 72, 24 \\ 2 | 18, 36, 6, 2 \\ 2 | 18, 3, 3, 1 \\ 3 | 9, 3, 3, 1 \\ 3 | 3, 1 \\ 1 \end{array}$$

144

x 3

14

ARITHMETIC

ଅଜୟ ବାର୍ଷକ 5% ସରଳ ସୁଧାରେ କିଛି ଟଙ୍କା ରଣ୍ଟାଠାରୁ କରଇ କରି ଦୁଇବର୍ଷ ପରେ ୮୫,୮୦୦ ଦେଇ ରଣ୍ମୁନ୍ତ ହେଲା । ତେବେ ସୁଧା ବାବଦକୁ ଅଜୟଙ୍କ କେତେ ଟଙ୍କା ଦେବାକୁ ପଡ଼ିଲା?

17. What number shall be multiplied by that number to make a product of 41209?
(A) 207 (B) 203 (C) 209

କେଉଁ ସଂଖ୍ୟାକ ସେହି ସଂଖ୍ୟା ଦ୍ୱାରା ଗଣିଲେ ଗଣପଳ 41209 ହେବ?

(A) 207 (B) 203 (C) 209 (D) 213

18. If certain principal is doubled in 20 years, how many years will it take for that principal to multiply by 4 times?

ଯଦି କୌଣସି ମଳଧନ 20 ବର୍ଷରେ ଦ୍ଵିଗଣିତ ହୁୟ ତେବେ କେବେ କେବେ ଦ୍ଵିଗଣିତ ହୁଏ ତାଙ୍କ ମଳଧନ 4 ଗଣ ହେବ ?

(A) 40 ହର୍ଷ (B) 50 ହର୍ଷ (C) 60 ହର୍ଷ (D) 80 ହର୍ଷ

19. The sum of two numbers is 384 and their HCF is 48. What is the difference between the two numbers?
(A) 48 (B) 96 (C) 144 (D) 192

ଦକ୍ଷତି ସଂଖ୍ୟାର ଯୋଗପଦଳ 384 ଏବଂ ସଂଖ୍ୟାହମ୍ବନ ଗ ସା ଗ 48 । ତେବେ ସଂଖ୍ୟାହମ୍ବନ ମଧ୍ୟରେ ଅନ୍ତର କେତେ?

(A) 48 (B) 96 (C) 144 (D) 192

20. How many hours is 20% of 40% of 4 hours and 20 minutes?
(A) $1\frac{3}{6}$ hours (B) $\frac{26}{75}$ hours (C) 13 hours (D) None of these

4 ପକ୍ଷା 20 ସିନ୍ଧିକ ର 40% ର 20% କେତେ ପକ୍ଷା?

(A) 13/6 ମଧ୍ୟ (B) 26/75 ମଧ୍ୟ (C) 13 ମଧ୍ୟ (D) କୌଣସି ହେବୁ

21. 350 students read in a school. The ratio of the boy and the girls is 4:3. How many girls have to leave the school to make their proportion 2:1?

ଗୋଟିଏ ବିଦ୍ୟାଳୟରେ 350 ଜଣ ପିଲା ପାଠ ପଡ଼ନ୍ତି । ସେମାନଙ୍କ ମଧ୍ୟରୁ ପୁଅ ଓ ଟିଆଙ୍କ ଅନୁପାତ $4:3$ । ବିଦ୍ୟାଳୟରୁ କେତେ ଜଣ ଛାତ୍ର ।

(A) 20 (B) 30 (C) 40 (D) 50

22. The average age of 25 boys is 15. If the average ages of first and the last 12 boys are 14.5 & 15.5 respectively, what is the age of 13th boy?

25 ଜଣ ବାଲକଙ୍କର ହାରାହାରି ବୟସ 15. ଯଦି ପ୍ରଥମ 12 ଜଣ ଓ ଶେଷ 12 ଜଣଙ୍କର ହାରାହାରି ବୟସ ଯଥାକ୍ରମେ 14.5 ଓ 15.5 ହୁଏ,

$$24 \text{ year} = 88 \text{ w}$$

$$\begin{array}{r}
 75 \mid 260.34 \text{ hr} \\
 \underline{0} \\
 \underline{260} \\
 \underline{225} \\
 \underline{\cancel{350}} \text{ min} \\
 \cancel{500}
 \end{array}$$

$$\begin{array}{r}
 \underline{8800} \times 5\% \\
 \hline
 & 203 \\
 & \overline{41209} \\
 \begin{array}{r} 2 \\ 1 \\ 4 \end{array} & \overline{012} \\
 \hline
 & 1209 \\
 \begin{array}{r} 403 \\ 1209 \end{array} & \overline{0}
 \end{array}$$

$$\frac{8000 \times 55}{100} = 4400$$

$$26\phi \times \frac{40}{149} = 104 \text{ rev/min}$$

20.8 min

ARITHMETIC

23. In how many years the interest on principal amount of Rs. 2,500 @ 3% interest will be equal to the interest @ 7% for 5 years on principal amount of Rs. 1,500?
 (A) 5 Years (B) 6 Years (C) 7 Years (D) 8 Years

କେତେ ବର୍ଷରେ 3% ସରଳ ସୁଧରେ 2,500 ମୂଲ୍ୟର ସୁଧ, 1,500 ମୂଲ୍ୟର 7% ସରଳ ସୁଧରେ 5 ବର୍ଷର ସୁଧ ସହିତ ସମାନ ହେବ ?

(A) 5 ବର୍ଷ (B) 6 ବର୍ଷ (C) 7 ବର୍ଷ (D) 8 ବର୍ଷ

24. The rate of sugar having increased by 25%, Seema purchased 1kg less than before with Rs.100. What is the present rate of sugar per kg?

(A) Rs.20 (B) Rs.20.50 (C) Rs.25 (D) Rs.30

$$25\% = \frac{1}{4}$$

$$\text{Rs. } 100 \times \frac{1}{4} = 25$$

ଚିନିର ଦର 25% ବଢ଼ିଯାଇଥାରୁ ସାମା 100 ଟଙ୍କାରେ ପୂର୍ବାପେକ୍ଷା '1' କିଗ୍ରା କମ୍ ଚିନି କଣିଲା । ବର୍ତ୍ତମାନ ଚିନିର କିଗ୍ରା ପ୍ରତି ଦର କେତେ ?

(A) 20 (B) 20.50 (C) 25 (D) 30

25) The radius of a cylinder is the same as that of a sphere. Their volumes are equal. The height of the cylinder is how many times its radius?

(A) 4/3 (B) 2/3 (C) 1 (D) 2



*answered
6/8*
ଗୋଟିଏ ସିଲିଣ୍ଡର ବ୍ୟାସାର୍ଦ୍ଦ ଗୋଲକର ବ୍ୟାସାର୍ଦ୍ଦ ସଙ୍ଗେ ସମାନ । ସେମାନଙ୍କର ଆୟତନ ସମାନ ଅଟେ । ତେବେ ସିଲିଣ୍ଡର ଉଚ୍ଚତା ତାହାର ବ୍ୟାସାର୍ଦ୍ଦର କେତେ ଗୁଣ ?

(A) 4/3 (B) 2/3 (C) 1 (D) 2

26) The H.C.F of two numbers is 13. If one number is 91, what is the other number?

(A) 7 (B) 65 (C) 13 (D) 63

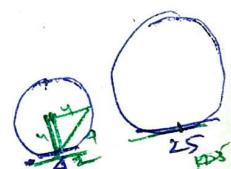
$$13 \times 7 = 91$$

ଦୁଇଟି ସଂଖ୍ୟାର ଗ.ସ.ମୁ. 13 । ଗୋଟିଏ ସଂଖ୍ୟା 91 ହେଲେ, ଅନ୍ୟଟି ସଂଖ୍ୟାଟି କେତେ ?

(A) 7 (B) 65 (C) 13 (D) 63

27) If the surface areas of two spheres are in the ratio of 4:25, the ratio of their volume is-

(A) 4:25 (B) 25:4 (C) 125:8 (D) 8:125



ଯଦି 2 ଟି ଗୋଲକର ପୃଷ୍ଠାକାର ଅନୁପାତ 4:25 ହୁଏ, ତେବେ ସେମାନଙ୍କ ଘନପରିମା ଅନୁପାତ କେତେ ?

(A) 4:25 (B) 25:4 (C) 125:8 (D) 8:125

28) 15 years back, my age was 3 times the age my son. Now my age is 2 times the age of my son. What is the total age of both of us?

(A) 60 years (B) 64 years (C) 72 years (D) 90 years

$$45 - 15 = 30$$

$$60 \times 2 = 120$$

$$120 + 30 = 150$$

15 ବର୍ଷ ପୂର୍ବେ ମୋର ବୟସ ମୋପୁଅ ବୟସର 3 ଗୁଣ ଥିଲା । ବର୍ତ୍ତମାନ ମୋର ବୟସ ମୋ ପୁଅ ବୟସର ଦୁଇଗୁଣ ଅଟେ । ତେବେ ବର୍ତ୍ତମାନ ଆମ ଦୁଇ ଜୀବନଙ୍କର ବୟସ ମିଶି କେତେ ?

(A) 60 ବର୍ଷ (B) 64 ବର୍ଷ (C) 72 ବର୍ଷ (D) 90 ବର୍ଷ

$$x = 3y$$

29) If the area of a square size field is 133.6336 sq. meter, what is its perimeter?

(A) 48.24 ମି. (B) 46.42 ମି. (C) 46.24 ମି. (D) 46.32 ମି.

$$y = \frac{x}{3}$$

ଗୋଟିଏ ବର୍ଗକାର ପଢ଼ିଆର କ୍ଷେତ୍ରଫଳ 133.6336 ବ.ମି. ହେଲେ, ପଢ଼ିଆର ପରିସୀମା କେତେ ?

(A) 48.24 ମି. (B) 46.42 ମି. (C) 46.24 ମି. (D) 46.32 ମି.

$$(x+15) = (15+y)^2$$

$$x+15 = 30+2y$$

$$x-2y = 30-15$$

$$x-2y = 15$$

$$6x-24 = 15$$

$$4x = 90$$

$$x = \frac{90}{4}$$

$$25x^2 = 133.6336$$

$$x^2 = 133.6336$$

$$133.6336 = 105x^2$$

$$105x^2 = 133.6336$$

$$x^2 = 1.28$$

$$x = \sqrt{1.28}$$

$$x = 3y$$

$$m = 2y$$

$$x = 7$$

$$525$$

$$x = 3y$$

$$28.25$$

ARITHMETIC

30. Find out the LCM of $a^2 + ab$ & $ab - b^2$.
 (A) $ab(a + b)(a - b)$ (B) $a(a - b)(a - b)$ (C) $b(a + b)(a + b)$ (D) $ab(a - b)(a + b)$

$a^2 + ab$ & $ab - b^2$ ର ଲୁହା ଗୁଡ଼ କେନ୍ଦ୍ର ?

(A) $ab(a+b)(a-b)$ (B) $a(a-b)(a-b)$ (C) $b(a+b)(a+b)$ (D) $ab(a-b)(a+b)$

6375 ରେ କେଉଁ ଷ୍ଟତ୍ରତମ ସଂଖ୍ୟା ଯୋଗ କଲେ ଯୋଗଫଳ ଏଇ ମର୍ଗ ର୍ତ୍ତବ୍ୟ ମଧ୍ୟ ନେଇ?

32. There are 200 boys and girls and 10 teachers in a school. If the proportion of boys and girls is 7:3 what is the ratio of boys, girls and teachers?

(A) 7: 3: 1 (B) 7: 3: 2 (C) 6: 14: 1 (D) 14: 6: 1

ଏକ ବିଦ୍ୟାଳୟରେ 200 ଜଣ ଛାତ୍ରଛାତ୍ରୀ ଓ 10 ଜଣ ଶିକ୍ଷକ ଅଛନ୍ତି । ଛାତ୍ର ଓ ଛାତ୍ରୀ ଅନୁପାତ $7:3$ ହେଲେ, ଛାତ୍ର, ଛାତ୍ରୀ ଓ ଶିକ୍ଷକଙ୍କ ଅନୁପାତ କେତେ ହେବ ?

(A) 7: 3: 1 (B) 7: 3: 2 (C) 6: 14: 1 (D) 14: 6: 1

ଦୁଇଟି ସଂଖ୍ୟାର ଯୋଗଫଳ 15 ଓ ସେମାନଙ୍କର ବର୍ଗର ଯୋଗଫଳ 113 । ତେବେ ସଂଖ୍ୟା ଦ୍ୱୟ କେତେ?

(A) 4, 11 (B) 5, 10 (C) 6, 9 (D) 7, 8

34. What will be the amount of compound interest if Rs. 8000 is lent at simple interest rate of 5% for three years?

8000 ଟଙ୍କା ମଳଧନକୁ ଶତକଟା 5 ଟଙ୍କା ସୁଧ ହାରରେ କରନ୍ତି ଦେଲେ ତିନି ବର୍ଷପରେ ଚକ୍ରବୃଦ୍ଧି ସୁଧ କେତେ ହେବ?

(A) Rs. 1281 (B) Rs. 1271 (C) Rs. 1261 (D) Rs. 1251

35. A shopkeeper purchased 50 pens at Rs.50 each. He sold 40 pens at a loss of 5%. At what percentage of profit must he sell the balance pens to get 10% profit on the whole?

କଣେ କଲ୍ପନା ଦୋକାନୀ 1 କଲମ ପ୍ରତି 750 ହିସାବରେ 50 ଟି କଲମ କିଣିଲା । ସେଥିମଧ୍ୟ 40 ଟି କଲମକୁ 5% ଛତିରେ ବିକ୍ରିକଲା । ତେବେ ଅବଶିଷ୍ଟ କଲମ ଗୁଡ଼ିକୁ ସେ କେତେ ଶତକଟା ଲାଭରେ ବିକ୍ରିକଲେ ତା'ର ମୋଟ ଉପରେ 10% ଲାଭ ହେବ?

(A) 15% (B) 40% (C) 50% (D) 70%

36. If the salary of 'A' is 25% higher than the salary of 'B', by what percent is the salary of 'B' less than the salary of 'A'? (A) 20% (B) 25% (C) 10% (D) 30% 8

যদি A র দরমা B দরমার 25% অধিক হুঁ এ, তেবে B র দরমা A দরমার শতকরা কেতে কম?

$$\begin{array}{r} \text{a}^2 + ab, ab - b^2 \\ \hline a(a+b), b(a-b) \\ \hline 50 \times 50 = 2500. \quad 30 \times 20 = 600 \\ 40 \times 50 = 2000 \times \frac{5}{100} = 100 \\ 2500 \times \frac{10}{100} = 250 \\ \hline \end{array}$$

$$\begin{array}{r}
 6375 \\
 \times 50 \\
 \hline
 31875
 \end{array}$$

$$\begin{array}{r}
 A = B + 25\% \\
 125 = 100 + 25 \\
 \underline{100} \quad \times 1 + \frac{25}{100} = 4 \\
 \underline{\underline{25}} \quad \underline{\underline{100}} \\
 \hline
 180 | 640 \\
 \hline
 180 \\
 \hline
 640 \\
 \hline
 \end{array}$$

ARITHMETIC

37. The purchase price of a bicycle is Rs.2000/- Its marked price is 50 percent more than the purchase price and the rebate is 20%. Find out the sale price of the bicycle?
 (A) Rs.2300 (B) Rs.2400 (C) Rs.2500 (D) Rs.2600

গোটিএ সাইকেলের ক্রয়মূল্য ৳.2000। এহার লিখিত মূল্য ক্রয়মূল্য অপেক্ষা 50% অধিক ও রিহাবি 20% হলে, সাইকেলের বিক্রিমূল্য কেতে?

(A) 2300 ৳. (B) 2400 ৳. (C) 2500 ৳. (D) 2600 ৳.

38. A metal sphere of 5 cm radius is melted to make a cone with base of the same radius. What is the height of the cone?
 (A) 10 cm (B) 15 cm (C) 20 cm (D) 5 cm

৫ সে.মি. ব্যাসার্ধে বিশিষ্ট গোটিএ ধাবক গোলককু তরলাই ঘমব্যাসার্ধ বিশিষ্ট এক কোনো রে পরিণত করাগলা। যেহেতু কোনো র উচ্চতা কেতে?

(A) 10 cm (B) 15 cm (C) 20 cm (D) 5 cm

39. The H.C.F of 2 numbers is 3 and the L.C.M is 60. If one number is 12 what is the other number?
 (A) 5 (B) 15 (C) 18 (D) 36

দুজনি সংখ্যার গ.স.গু. ৩, ল.স.গু. ৬০। গোটিএ সংখ্যা ১২ হলে অন্যটি কেতে?

(A) 5 (B) 15 (C) 18 (D) 36

40. The proportion of two numbers is 3:5 and their L.C.M. is 225. Then find out the smaller number?
 (A) 45 (B) 60 (C) 75 (D) 90

দুজনি সংখ্যার অনুপাত 3:5 এবং সেমানকার ল.স.গু. 225। তেবে সামন সংখ্যাটি কেতে?

(A) 45 (B) 60 (C) 75 (D) 90

41. In how many years Rs.6250 will earn compound interest of Rs.510 if saved in a bank at the interest rate of 4% per annum?
 (A) 2 years (B) 3 years (C) 4 years (D) 5 years

শতকাটা 4 টকা হারে 6250 টকা গোটিএ ব্যাজের রশ্মিলে কেতে বর্ষে তাৰ ক্রতৃপক্ষ সুধ 510 টকা হৈব ?
 (A) 2 years (B) 3 years (C) 4 years (D) 5 years

42. The length of a rectangular is 1.5 times its width. If its area is 1350 sq. meter, what is its perimeter?
 (A) 120 মি. (B) 130 মি. (C) 140 মি. (D) 150 মি.

গোটিএ আয়ত ক্ষেত্রে দৈর্ঘ্য প্রশ্নের দেও গুণ। এহার ক্ষেত্রফল 1350 বি. মিটা হলে, এহার পরিসীমা কেতে ?
 (A) 120 মি. (B) 130 মি. (C) 140 মি. (D) 150 মি.

43. The difference between simple interest and compound interest of certain amount at the interest rate of 10% in 3 years is Rs.93. What is that amount?
 (A) Rs.6000 (B) Rs.5000 (C) Rs.4000 (D) Rs.3000

শতকাটা 10 টকা হারে ৩ বর্ষে কৌশলি মূলধনৰ ঘৰল সুধ এবং ক্রতৃপক্ষ সুধ মধ্যে পার্থক্য ৯৩ টকা। যেহেতু মূলধনৰ পরিমাণ কেতে ?
 (A) Rs.6000 (B) Rs.5000 (C) Rs.4000 (D) Rs.3000

$$\frac{1000}{2000} \times \frac{100}{100} = \frac{600}{3000} + \frac{20}{100} = 600$$

$$\frac{1}{5} \times \frac{22}{7} \times \frac{340}{340}$$

$$\frac{3 \times 60^2}{2 \times 12} = 15 \quad 270 \times \frac{1}{3} = 90 \\ \frac{675}{360} = 1.875 \quad 90 \times 1.875 = 168.75 \\ 168.75 - 33.75 = 135$$

ARITHMETIC

44. The proportion of copper, lead and nickel in an alloy of 100kg is 5:3:2. How much nickel would be added to the alloy to make their proportion of the new alloy 5:3:3?

(A) 8 kg. (B) 10 kg. (C) 12 kg. (D) 15 kg.

100 କେ.ରି. ର ଏକ ଲୋହରେ ଥିବା ତ୍ରୟୀ, ସୀରା ଏବଂ ନିକେଳର ଅନୁପାତ $5 : 3 : 2$ ଅଟେ । ଉଚ୍ଚ ଲୋହରେ କେତେ ପରିମାଣର ନିକେଳ ମିଶାଇଲେ ନୂଆ ଲୋହର ଅନୁପାତ $5 : 3 : 3$ ହେବ ?

(A) 8 କେ.ରି. (B) 10 କେ.ରି. (C) 12 କେ.ରି. (D) 15 କେ.ରି.

45. Two taps 'A' and 'B' can fill a cistern in 28 minutes and 56 minutes respectively. A third tap 'C' can empty it in 42 minutes. If all the three taps are open, the time taken to fill the cistern will be:

(A) 32 minutes (B) 33.6 minutes (C) 33.8 minutes (D) 34 minutes

ଦୁଇଟି ପାଣିନଳ A ଏବଂ B ଗୋଟିଏ କୁଣ୍ଡକୁ ଯଥାକ୍ରମେ 28 ମିନିଟ୍ ଓ 56 ମିନିଟରେ ପୂର୍ଣ୍ଣ କରିପାରନ୍ତି । ତୃତୀୟ ପାଣିନଳ 42 ମିନିଟରେ ତାହାକୁ ଖାଲି କରିପାରେ । ଯଦି ସମସ୍ତ ପାଣିନଳକୁ ଏକ ସମୟରେ ଖୋଲିଦିଆଯାଏ, ତେବେ କୁଣ୍ଡଟି ପୂର୍ଣ୍ଣହେବାକୁ କେତେ ସମୟ ଲାଗିବ ?

(A) 32 minutes (B) 33.6 minutes (C) 33.8 minutes (D) 34 minutes

46. If $A : B = 3:4$ and $B:C = 8:9$, what is $A:B:C$?

(A) 8:6:9 (B) 6:8:9 (C) 9:8:6 (D) 3:32:9

ଯଦି $A : B = 3:4$ ଓ $B:C = 8:9$ ହୁଏ, ତେବେ A : B : C କେତେ ?

(A) 8:6:9 (B) 6:8:9 (C) 9:8:6 (D) 3:32:9

47. Mohan suffered a loss of 10% by selling his wristwatch at Rs.1440. At what price he should have sold the watch to get a profit of 10%?

(A) Rs.1,650 (B) Rs.1,700 (C) Rs.1,760 (D) Rs.1,820

ମୋହନ ତା'ର ହାତଘଣ୍ଠାଟିକୁ ଟ 1,440 ରେ ବିକ୍ରିକରି 10% କଷତି ସହିଲା । ତେବେ ସେ ଘଣ୍ଠାଟିକୁ କେତେ ଟଙ୍କାରେ ବିକ୍ରି କରିଥିଲେ 10% ଲାଭ ପାଇଥାନ୍ତା ?

(A) 1,650 (B) 1,700 (C) 1,760 (D) 1,820

48. If the proportion of 3 numbers is 3:5:7 and their L.C.M is 4200, what is their H.C.F?

(A) 40 (B) 80 (C) 120 (D) 200

ତିନୋଟି ସଂଖ୍ୟାର ଅନୁପାତ $3 : 5 : 7$ ଏବଂ ସେମାନଙ୍କର ଲ. ସା. ଗୁ. 4200, ତେବେ ସେମାନଙ୍କର ଗ. ସା. ଗୁ. କେତେ ?

(A) 40 (B) 80 (C) 120 (D) 200

49. When all the students of school are made to stand in lines to form a square, less than 10 students are left surplus. If the students of the school are 1230, how many students will stand on each line?

(A) 32 ଜଣ (B) 34 ଜଣ (C) 35 ଜଣ (D) 36 ଜଣ

ଏକ ବିଦ୍ୟାଳ୍ୟର ଛାତ୍ରମାନଙ୍କୁ ବର୍ଗକାର ଷେତ୍ରରେ ଧାତି ଧାତି କରି ଠିଆ କରାଇବାରୁ 10 ରୁ କମ ଛାତ୍ର ବଳିପଢ଼ିଲେ । ସ୍ମୂଲ ଛାତ୍ରସଂଖ୍ୟା 1230 ଜଣ ହେଲେ ପ୍ରତିଧାତିରେ କେତେ ଜଣ ଛାତ୍ର ଛିଦା ହେଲେ ?

(A) 32 ଜଣ (B) 34 ଜଣ (C) 35 ଜଣ (D) 36 ଜଣ

50. The H.C.F of three numbers is 3 and their L.C.M is 720. If the 1st and 2nd numbers are 15 & 36, what is the 3rd number?

(A) 16 (B) 14 (C) 12 (D) 10

ତିନୋଟି ସଂଖ୍ୟାର ଗ. ସା. ଗୁ. 3 ଓ ଲ. ସା. ଗୁ. 720 । ଯଦି ପ୍ରଥମ ଓ ଦ୍ୱିତୀୟ ସଂଖ୍ୟାଦୟ 15 ଓ 36 ଦୁଆନ୍ତି, ତେବେ ତୃତୀୟ ସଂଖ୍ୟାଟି କେତେ ?

(A) 16 (B) 14 (C) 12 (D) 10

$$\begin{array}{r} 204 \\ 3 \times 720 \\ \hline 15 \times 36 \end{array}$$

$$\begin{array}{r} 36 \\ 720 \\ \hline 4 \end{array}$$



36

1224

ARITHMETIC

51. Rahim reared some hen and goats. If the heads of the hens and goats are 90 and their legs are 248, how many goats did Rahim rear?

(A) 32 (B) 34 (C) 36 (D) 40

$$\begin{array}{r} 156 \\ - 411 \\ \hline 248 \end{array}$$

ରହିମ କିଛି କୁକୁଡା ଓ ଛେଳି ପାଲିଥିଲା । ଯଦି ଛେଳି ଓ କୁକୁଡା ମୁଣ୍ଡ ମିଳି 90 ଓ ଗୋଟ ମିଳି 248 ହୁଏ, ତେବେ ରହିମ କେତୋଟି ଛେଳି ପାଲିଥିଲା ?

(A) 32 (B) 34 (C) 36 (D) 40

$$\begin{array}{r} 90 \\ - 34 \\ \hline 56 \\ - 56 \\ \hline 0 \\ 112 \\ - 112 \\ \hline 0 \\ 248 \\ - 136 \\ \hline 112 \\ - 112 \\ \hline 0 \end{array}$$

52. The population of a town is Rs. 3, 00, 000. If the birth rate is 5% and the death 3%, what will be the population of that town after 2 years?

(A) 321120 (B) 311220 (C) 312120 (D) 322110

ଗୋଟିଏ ସହରର ଲୋକସଂଖ୍ୟା 3, 00,000 । ଯଦି ଜନ୍ମହାର 5% ଓ ମୃତ୍ୟୁହାର 3% ହୋଇଥାଏ, ତେବେ 2 ବର୍ଷ ପରେ ସେହି ସହରର ଲୋକ ସଂଖ୍ୟା କେତେ ହେବ ?

(A) 321120 (B) 311220 (C) 312120 (D) 322110

53. $\frac{a-b}{ab} + \frac{b-c}{bc} + \frac{c-a}{ca} = \underline{\quad} ?$

$$\begin{array}{r} 300000 \times 5 \\ \hline 100 \end{array}$$

(A) 0 (B) $\frac{1}{a}$ (C) $\frac{1}{b}$ (D) $\frac{1}{c}$

$$\begin{array}{r} = 15000 \\ - 1000 \\ \hline 6 \end{array}$$

(A) 0 (B) $\frac{1}{a}$ (C) $\frac{1}{b}$ (D) $\frac{1}{c}$

$$\begin{array}{r} 360000 \times 5 \\ \hline 100 \end{array}$$

54. The ratio between the length and breadth of a rectangular field is 5:4. If the breadth is 20m less than the length, the perimeter of the field is:

(A) 260 m (B) 280 m (C) 360 m (D) None

$$\begin{array}{r} - 18000 \\ \hline 7200 \end{array}$$

ଗୋଟିଏ ଆୟତ କ୍ଷେତ୍ର ଦେଖ୍ୟ ଓ ପ୍ରସ୍ତର ଅନୁପାତ 5:4 । ଯଦି ଏହାର ପ୍ରସ୍ତର ଦେଖ୍ୟଠାରୁ 20 ମିଟର କମ ହୋଇଥାଏ , ତେବେ ଆୟତ କ୍ଷେତ୍ର ପରିସୀମା କେତେ ?

(A) 260 m (B) 280 m (C) 360 m (D) None

55. If the proportion of the sides of 2 cubes is 3:4, what is proportion of their volume?

(A) 3: 4 (B) 4:3 (C) 64: 27 (D) 27: 64

$$\begin{array}{r} 8 \\ \hline 27 \end{array}$$

ଦୁଇଟି ସମସ୍ତନର ବାହୁ ମାନଙ୍କର ଅନୁପାତ 3: 4 ହେଲେ, ସେମାନଙ୍କର ଆୟତନର ଅନୁପାତ କେତେ ହେବ ?

(A) 3: 4 (B) 4:3 (C) 64: 27 (D) 27: 64

56. What is the amount of principal and interest of Rs. 860 in 2 years @2 paise per rupee per month?

(A) Rs.1227.80 (B) Rs.1722.80 (C) Rs.1272.80 (D) Rs.1722

$$\begin{array}{r} 172 \\ - 122 \\ \hline 50 \\ \times 2 \\ \hline 100 \\ + 212 \\ \hline 2120 \\ \times 860 \\ \hline 172000 \\ \times 12 \\ \hline 206400 \end{array}$$

ଟଙ୍କା ପ୍ରତି ମାସକୁ 2 ପଚାବା ହିସାବରେ 860 ଟଙ୍କାର 2 ବର୍ଷର ସମୂଳସୁଧ କେତେ ?

(A) ₹. 1227.80 (B) ₹. 1722.80 (C) ₹. 1272.80 (D) ₹. 1722

57. In a division the divisor is 4 times the quotient and 3 times reminder. If the remainder is 4, what is the dividend?

(A) 16 (B) 19 (C) 40 (D) 48

ଏକ ଭାଗକ୍ରିୟାରେ ଭାଜକ, ଭାଗଫଳର 4 ଗୁଣ ଏବଂ ଭାଗଶେଷର 3 ଗୁଣ ଅରେ । ଯଦି ଭାଗଶେଷ 4 ହୁଏ, ତେବେ ଭାଜ୍ୟ କେତେ ?

(A) 16 (B) 19 (C) 40 (D) 48

$$\begin{array}{r} 12 \\ - 3 \\ \hline 9 \\ \times 4 \\ \hline 36 \\ \hline 36 \\ - 36 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 860 \\ \times 34 \\ \hline 3440 \\ 2580 \\ \hline 2904 \end{array}$$

$$\begin{array}{r} 100 \times 20 \\ \times 860 \\ \hline 172000 \times 12 \\ \hline 206400 \end{array}$$

ARITHMETIC

65. 'A' sold a cycle to 'B' @20% profit and 'B' sold the cycle to 'C' at 25% profit. If 'C' purchased cycle at Rs.1500, what is the sale price of the cycle?

(A) 1200 (B) 1100 (C) 1000 (D) None of these

$$\text{1.W} \quad 1200 \times 25\% = 300 \quad 1500$$

A, B কু এক সাইকেল 20 % লাভে ৩ B, C কু 25% লাভে বিক্রিকলে। যদি C সাইকেলকু ট.1500 রে কিশিথাএ, তেবে সাইকেল বিক্রিমাল্য কেতে ?

(A) 1200 (B) 1100 (C) 1000 (D) কোণস্বিটি নুহেঁ

66. A cube of side 6 cm is cut in to a number of cubes, each of side 2 cm. The number of cubes will be:

(A) 6 (B) 9 (C) 12 (D) 27

6 ষ. মি. বাহু বিশিষ্ট এক সময়নকু কাটি কেতে গুড়ি 2 ষ. মি. বাহু বিশিষ্ট সময়নরে পরিণত করাগলা। তেবে এক সময়ন গুড়িকর সংখ্যা কেতে হেব?

67. What is the rate of interest if the principal amount becomes 3 times including the principal and interest in 20 years?

(A) 10% (B) 12% (C) 8% (D) 10.5%

কোণস্বিমূলধন 20 বৰ্ষে সুধ ৩ মূল মিশি মূলধনর ৩ গুণ হোজযাএ। সুধৰ হাৰ কেতে ?

$$100 \times 20 \times 10^2 = 2000$$

68. As shopkeeper earns a profit of 10% after giving 10 percent discount on a book. What is cost of the book, if its price is marked Rs.77/-?

(A) Rs.70 (B) Rs.77 (C) Rs.63 (D) Rs.60

জণে বহিৰোকানী খণ্ডে বহি উপৰে 10% রিহাতি দেবাপৰে মধ্য 10% লাভ কৰান্তি। যদি বহি উপৰে দাম 77 টকা লেখা। যাইথাএ, তাহা হেলে বহি উপৰে কুমুল্য কেতে ?

(A) 70 টকা (B) 77 টকা (C) 63 টকা (D) 60 টকা

$$77 \times 100 = 70$$

69. Nabaghana borrowed Rs.10,000 from a bank at an interest rate of 10% and lent the same to 02 persons at 13% interest. How much profit he will earn after 5 years after repaying bank loan?

(A) Rs.1200 (B) Rs.1500 (C) Rs. 2100 (D) Rs.2500

নবজন 10% হাৰে ব্যাঙ্কৰ 10,000 টকা কৰান্তি 13% হাৰে মুজৱশা লোককু কৰান্তি দেলা। 5 বৰ্ষ শেষৰে যেখুন তা'ৰ ব্যাঙ্ক রশি পরিশোধ কৰি কেতে গৰি লাভ পাইব ?

(A) 1200 ট. (B) 1500 ট. (C) 2100 ট. (D) 2500 ট.

$$100 \times 10 = 1000 \times 5 \\ 100 \times 13 = 1300 \times 5 \\ 6500$$

70. The product of two numbers is 70 and their addition is 17. What is the difference between the two?

(A) 3 (B) 4 (C) 5 (D) 6

$$5800$$

দুজটি সংখ্যার গুণফল 70 ও যোগফল 17। তেবে সংখ্যা দুজটিৰ অন্তৰ ফল কেতে ?

(A) 3 (B) 4 (C) 5 (D) 6

$$10 \times 7$$

$$12 | \begin{array}{r} 1600 \\ -12 \\ \hline 40 \\ -36 \\ \hline 4 \end{array} | 133$$

$$\begin{array}{r} 2000 \times 5 \times 2 = 200 \\ 2000 \times 5 = 100 \\ 2100 \times 5 = 105 \\ \hline 205 \end{array}$$

ARITHMETIC

71. If the difference between compound interest and simple interest on certain money at 5% per annum in 2 years is Rs.5, what is amount of the principal?
 (A) Rs. 2000 (B) Rs. 1000 (C) Rs. 1500 (D) Rs. 2500

ବାର୍ଷିକ ଶତକଟା 5% ହାର ସୁଧରେ 2 ବର୍ଷରେ କୌଣସି ମୂଳଧନର ସରଳ ସୁଧ ଓ ଚକ୍ରବୃଦ୍ଧି ସୁଧ ମଧ୍ୟରେ ପାର୍ଥକ୍ୟ ଯଦି 5.
 ହୁଏ, ମୂଳଧନର ପରିମାଣ କେତେ ହେବ ?

(A) Rs. 2000 (B) Rs. 1000 (C) Rs. 1500 (D) Rs. 2500

72. If the ratio of volumes of two spheres is 1:8, the ratio of their surface area is-
 (A) 1:2 (B) 1:4 (C) 1:8 (D) 1:16

ଯଦି ଦୁଇଟି ଗୋଲକର ଘନଫଳର ଅନୁପାତ 1:8 ହୁଏ, ତେବେ ତା'ର ଉପରିଭାଗର କ୍ଷେତ୍ରଫଳର ଅନୁପାତ କେତେ ?
 (A) 1:2 (B) 1:4 (C) 1:8 (D) 1:16

73. What smallest number has to be deducted from 1294 to leave a remainder of 6 in each case when divided by 9, 11 & 13?
 (A) 1 (B) 2 (C) 3 (D) 4

1294 ରୁ କେଉଁ କ୍ଷେତ୍ରଫଳ ସଂଖ୍ୟା ବିଯୋଗ କରି 9, 11, 13 ଦ୍ୱାରା ଭାଗକଲେ ପ୍ରତ୍ୟେକ କ୍ଷେତ୍ରରେ ଭାଗଶେଷ 6 ରହିବ ?
 (A) 1 (B) 2 (C) 3 (D) 4

74. The proportion of two numbers is 5:6. If their H.C.F is 4 what is their L.C.M?
 (A) 90 (B) 96 (C) 120 (D) 150

ଦୁଇଟି ସଂଖ୍ୟାର ଅନୁପାତ 5:6। ଯଦି ସେମାନଙ୍କର ଗ.ସା.ଗୁ. 4 ହୁଏ, ତେବେ ସେମାନଙ୍କର ଲ.ସା.ଗୁ. କେତେ ?
 (A) 90 (B) 96 (C) 120 (D) 150

75. A dishonest businessman sells his goods and gains 20% profit on both the cost price and sale price using wrong measurement. What is the total percentage of his profit?
 (A) 50% (B) 40% (C) 44% (D) None of these above

ଜଣେ ଅସାଧୁ ବ୍ୟବସାୟୀ ଭୁଲ୍ ଓଜନ ବ୍ୟବହାର କରି ଉଭୟ କ୍ରମଫୁଲ୍ୟ ଓ ବିକ୍ରିଯ ମୂଲ୍ୟ ଉପରେ 20% ଲେଖାଏଁ ଲାଭ କରେ । ତେବେ ତା'ର ମୋଟରେ ଶତକଟା କେତେ ଲାଭ ହୁଏ ?
 (A) 50% (B) 40% (C) 44% (D) ଏଥମାତ୍ର କୌଣସିଟି ନୁହେଁ

76. A person borrowed Rs.5000 from a bank at a compound interest of 10% to purchase a water pump. What amount of money will he repay the bank after 3 years to be free of the debt?

(A) Rs.6655 (B) Rs.6055 (C) Rs.5555 (D) Rs.5255

ଗୋଟିଏ ପାଣି ପଞ୍ଚ କିଲିବାକୁ ଜଣେ ଲୋକ 10 ପ୍ରତିଶତ ଚକ୍ରବୃଦ୍ଧି ସୁଧ ହାରରେ ବ୍ୟାଙ୍କରୁ 5000 ଟଙ୍କା ରଣ ଉଠାଇଲେ । 3 ବର୍ଷପରେ ମୋଟ କେତେ ଟଙ୍କା ଦେଇ ସେ ବ୍ୟାଙ୍କରୁ ରଣ ମୁକ୍ତ ହେବେ ।

(A) Rs.6655 (B) Rs.6055 (C) Rs.5555 (D) Rs.5255

77. Hari bought 1600 eggs @Rs.3.75 per dozen. He sold 900 eggs @2 eggs per rupee and the rest at the rate of 5 eggs per Rs.2/- . What was his percentage of profit?

(A) 40% (B) 42% (C) 45% (D) 46%

ହରି ଉଜନ ପ୍ରତି 3.75 ପଇସାରେ 1600 ଟି ଅଣା କିଣିଲା । ସେଥି ମଧ୍ୟରୁ 900 ଟି ଅଣାକୁ 1 ଟଙ୍କାରେ 2ଟି ଓ ଅବଶିଷ୍ଟ ଅଣାକୁ 2 ଟଙ୍କାରେ 5 ଟି କରି ବିକ୍ରିକଲେ । ତେବେ ସେ କେତେ ଶତକଟା ଲାଭ ପାଇଲେ ?

(A) 40% (B) 42% (C) 45% (D) 46%

$$\frac{5000 \times 10}{100} = 500$$

$$\frac{500 \times 10}{100} = 500$$

$$\frac{500 \times 550}{6050} \times 10 = 605$$

$$\frac{500}{6655} \times 1655$$

ARITHMETIC

ଯଦି ଗୋଟିଏ କୋନ୍ ର ଉଚତାକୁ ଦୁଇ ଗୁଣ କରାଯାଏ, ତେବେ ଏହାର ଆୟଉନ କେତେ ବଢ଼ିପାଇବ ?

79. The addition of two numbers is 384 and their H.C.F is 48. What is the ratio between the two numbers?
(A) 3:5 (B) 4:5 (C) 2:3 (D) 1:3

ଦୁଇଟି ସଂଖ୍ୟାର ଯୋଗଫଳ ୩୮୪ ଓ ଗହାଗୁ ୪୮ ହେଲେ, ସଂଖ୍ୟା ଦ୍ୱୟର ଅନ୍ତର କେତେ ?

(A) 3:5 (B) 4:5 (C) 2:3 (D) 1:3

ଦୁଇଟି ସଂଖ୍ୟାର ଗୁଣପତ୍ର 216 ଏବଂ ସେମାନଙ୍କର ଗ.ସା.ଗ୍ର. 6 ହେଲେ, ସଂଖ୍ୟାଦ୍ୱୟର ଲ.ସା.ଗ୍ର. କେନ୍ଦ୍ର?

(A) 36 (B) 48 (C) 60 (D) 120

81. The depth of a water tank of cube size of equal sides is 200 c.m. If 1000 ltr of water is drawn-out of the tank daily, in how many days all the water of the tank be finished?

ଗୋଟିଏ ସମୟନାକାର ପାଣି ଟାଙ୍କିର ଗଭୀରତୀ 200 ସେ.ମି । ଏଥୁରୁ ଦେନିକ 1000 ଲିଟର ପାଣି କାଢିଦେଲେ, କେତେ ଦିନରେ ପାଣିତଳ ଶେଷ ହୋଇଯିବ ।

82. In exchange of two square size plots of 400 & 441 sq. meter, a man purchased one square size lot. What will be the expenditure if it is fenced at a rate of Rs.5.00/per meter?

ଜଣେ ଲୋକ ତାହାର 400 ଓ 441 ବର୍ଗ ମିଟରର ଦୁଇଟି ବର୍ଗାକାର ଜମି ବଦଳରେ ଗୋଟିଏ ବର୍ଗାକାର ଜାନ୍ମି କିଣିଲା । ଏଥୁରେ ବାତ ଦେବା ଖର୍ଚ୍ଚ ମିଟର ପ୍ରତି 5 ଟଙ୍କା ହିସାବରେ କେତେ ଖର୍ଚ୍ଚ ହେବ ?

ବାର୍ଷିକ କେତେ ହାର ସରଳସ୍ଵଧରେ କୌଣସି ମଳଧନ ୪ ବର୍ଷରେ ଦ୍ଵିଗଣିତ ହେବ ?

(A) 10% (B) 12.5% (C) 15% (D) 20%

84. The material of a cone was converted into the shape of a cylinder of equal radius. If the height of the cylinder is 6 cm, the height of the cone was-

ଗୋଟିଏ କୋନ୍ତା କୁ ଉଚଳାଇ ସମାନ ବ୍ୟାସାର୍ଥ ବିଶିଷ୍ଟ ଗୋଟିଏ ସିଲିଣ୍ଡରରେ ପରିଣତ କରାଗଲା । ଯଦି ସିଲିଣ୍ଡରର ଉଚ୍ଚତା 6 ସେ. ମି. ହୁଏ ତେବେ କୋନ୍ତା ର ଉଚ୍ଚତା କେତେ ହେବ ?

$$29 \times 4 = 116$$



284

$$\begin{array}{r} 29 \\ \underline{\times} 29 \\ \hline 261 \\ 58 \\ \hline 841 \end{array}$$

ARITHMETIC

85. The average of 6 members in family is 22 years. If the age of the youngest is 7 years, what was average age of the members of the family at the time of birth of the youngest?
 (A) 15 years (B) 16 years (C) 17 years (D) 18 years

ବାରର 6 ଜୀବିକର ହାରାହାରି ବୟସ 22 ବର୍ଷ । ଯଦି ସବା ସାନ ଜୀବିକର ବୟସ 7 ବର୍ଷରୁ ଏ, ତେବେ ସାନଜୀବି ଜନ୍ମ ସମୟରେ ପରିବାରର ସଭ୍ୟମାନଙ୍କର ହାରାହାରି ବୟସ କେତେ ଥିଲା ?

(A) 15 ବର୍ଷ (B) 16 ବର୍ଷ (C) 17 ବର୍ଷ (D) 18 ବର୍ଷ

86. What shall be the amount including compound interest, if Rs.1500 is invested at the interest rate of 7% in 2 years?
 (A) Rs.1717.35 (B) Rs.1727.35 (C) Rs.1737.35 (D) Rs.1747.35

ଶତକତା 7 ଟଙ୍କା ହାରରେ 1500 ଟଙ୍କାର 2 ବର୍ଷରେ ସମୂଳ ଚନ୍ଦ୍ରବୃଦ୍ଧି ସୁଧ କେତେ ହେବ ?
 (A) Rs.1717.35 (B) Rs.1727.35 (C) Rs.1737.35 (D) Rs.1747.35

87. Rs.832 was distributed between Ram & Govind. If the proportion of the money given to them is 1/3:1/5, how much money did Ram get?

(A) 312 (B) 520 (C) 500 (D) 332

ରାମ ଓ ଗୋବିନ୍ଦ ମଧ୍ୟରେ 832 ଟଙ୍କାକୁ ବାଣି ଦିଆଗଲା ! ସେମାନେ ପାଇଥିବା ଟଙ୍କାର ଅନୁପାତ 1/3 : 1/5 ହେଲେ, ରାମ କେତେ ଟଙ୍କା ପାଇବ ?

(A) 312 (B) 520 (C) 500 (D) 332

88. What smallest number shall be added to 11158 to make the addition divisible by 77?
 (A) 9 (B) 8 (C) 7 (D) 5

11158 ରେ କେଉଁ ଶୁଦ୍ଧତମ ସଂଖ୍ୟା ଯୋଗକରେ ଯୋଗଫଳ 77 ହାରା ବିଭାଜ୍ୟ ହେବ ?
 (A) 9 (B) 8 (C) 7 (D) 5

89. What is smallest complete square root number nearest to 1000?
 (A) 29 (B) 30 (C) 31 (D) 32

1000 ର ନିକତମ ଏବଂ ଶୁଦ୍ଧତମ ପୂର୍ଣ୍ଣ ବର୍ଗମୂଳଟି କେତେ ?
 (A) 29 (B) 30 (C) 31 (D) 32

90. The L.C.M of 25 & 30 is how many times their H.C.F?
 (A) 40 (B) 41 (C) 45 (D) None of these

35 ଓ 30 ଲ. ସା. ଗୁ. ଏମାନଙ୍କର ଗ. ସା. ଗୁ. ର କେତେ ଗୁଣ ?
 (A) 40 (B) 41 (C) 45 (D) କୌଣସିଟି ନୁହେଁ

91. $(0.021)^2 = \underline{\hspace{2cm}}$?
 (A) 441 (B) 0.0441 (C) 0.0441 (D) 0.000441

$(0.021)^2$ କେତେ ହେବ ?
 (A) 441 (B) 0.0441 (C) 0.0441 (D) 0.000441

92. Rakesh lent Prakash Rs.8750 at simple interest of 7%. How much interest will he get in 3 years?
 (A) Rs.1870 (B) Rs.1837.50 (C) Rs.560 (D) Rs.2200

ରାକେଶ ବାର୍ଷିକ 7% ସରଳ ସୁଧରେ ପ୍ରକାଶକୁ 8750 ଟାର ଦେଲା । ତେବେ ସେ 3 ବର୍ଷରେ କେତେ ସୁଧ ପାଇବ ?
 (A) 81870 (B) 81837.50 (C) 8560 (D) 82200

$$8750 \times \frac{7}{100}$$

$$6125 \times 3$$

$$\begin{array}{r} 3 \\ \hline 1 \\ 1 \\ 8 \\ 3 \\ 7 \\ 5 \end{array}$$

ARITHMETIC

93. If $517 * 324$ is divisible by 3, which of the following small number will replace the star?
 (A) 0 (B) 1 (C) 2 (D) None of these

ଯଦି $517 * 324$ ସଂଖ୍ୟାଟି 3 ଦ୍ୱାରା ବିଭାଜ୍ୟ ହୁଏ, ତେବେ * ଥିବା ଘାନରେ ନିମ୍ନୋକ୍ତ କେଉଁ ଶୁଦ୍ଧତମ ସଂଖ୍ୟାଟି ରହିବ ?
 (A) 0 (B) 1 (C) 2 (D) ଏମାନଙ୍କ ମଧ୍ୟରୁ କୌଣସିଟି ନୁହେଁ

94. The H.C.F of two numbers is 11 and their L.C.M is 7700. If one number is 275, what is the other number?
 (A) 279 (B) 283 (C) 308 (D) 318

ଦୁଇଟି ସଂଖ୍ୟାର ଗ. ସା. ଗ୍ର. 11 ଏବଂ ଲ. ସା. ଗ୍ର. 7700 । ଗୋଟିଏ ସଂଖ୍ୟା 275 ହେଲେ, ଅନ୍ୟ ସଂଖ୍ୟାଟି କେତେ?
 (A) 279 (B) 283 (C) 308 (D) 318

95. A, B, & C started a business investing Rs. 14000. If the amount of profit earned after one year by A, B & C is Rs. 337.50, Rs. 1125 & Rs. 637.50 respectively, what amount was invested by A?
 (A) 2250 (B) 7500 (C) 4200 (D) None of these

A, B ଓ C ମୋଟ Rs. 14000 ଦେଇ ଏକ ବ୍ୟବସାୟ ଆରମ୍ଭ କଲେ । ବର୍ଷକ ପରେ A, B ଓ C ପାଇଥିବା ଲାଭର ପରିମାଣ ଯଥାକ୍ରମେ
 Rs. 337.50, Rs. 1125, Rs. 637.50 ହେଲେ, A ର ବିନିଯୋଗ ଅର୍ଥ କେତେ ?

(A) 2250 (B) 7500 (C) 4200 (D) କୌଣସିଟି ନୁହେଁ

96. Which of the following number will fill up the gap in the series 4, 16, 36, 64, _____, 144?
 (A) 81 (B) 100 (C) 132 (D) 140

4, 16, 36, 64, _____, 144 ଅନୁକ୍ରମର ଶୁନ୍ୟ ଘାନରେ କେଉଁ ସଂଖ୍ୟା ରହିବ?
 (A) 81 (B) 100 (C) 132 (D) 140

97. Three cubes of iron whose edges are 6 cm, 8cm, and 10cm respectively are melted and formed in to a single cube. The edge of the new cube formed is:
 (A) 12 cm (B) 14 cm (C) 16 cm (D) 18 cm

6 ସେ.ମି., 8 ସେ.ମି. ଓ 10 ସେ. ମି. ବାହୁବିଶିଷ୍ଟ ତିନୋଟି ଲୌହ ନିର୍ଦ୍ଦିତ ସମୟନକୁ ତରଳାଇ ଏକ ନୂତନ ସମୟନରେ ପରିଣତ କଲେ,
 ଏହାର ବାହୁର ଦୈର୍ଘ୍ୟ କେତେ ହେବ ?
 (A) 12 cm (B) 14 cm (C) 16 cm (D) 18 cm

98. An examinee secures 30% marks and fails by 50 marks in an examination. Another examinee gets 32% marks and fails by 30 marks. What is the maximum marks of the examination?
 (A) 700 (B) 800 (C) 900 (D) 1000

ଜଣେ ପରୀକ୍ଷାର୍ଥୀ ଏକ ପରୀକ୍ଷାରେ 30% ନମ୍ବର ରଖୁଁ 50 ନମ୍ବର ପାଇଁ ଫେଲୁ ହୁଏ । ଆଉ ଜଣେ ପରୀକ୍ଷାର୍ଥୀ 320 ନମ୍ବର ରଖୁଁ 30 ନମ୍ବର
 ପାଇଁ ଫେଲୁ ହୁଏ । ତେବେ ପରୀକ୍ଷାର ସର୍ବାଧିକ ନମ୍ବର କେତେ ?

(A) 700 (B) 800 (C) 900 (D) 1000

99. 350 boys read in a school. The ratio of the boys and girls is 4:3. After some girls left the school their ratio turned to 2:1. How many girls left the school?
 (A) 20 (B) 30 (C) 40 (D) 50

ଗୋଟିଏ ବିଦ୍ୟାଳୟରେ 350 ଜଣ ପିଲା ପାଠ ପଢନ୍ତି । ସେମାନଙ୍କ ମଧ୍ୟ ପୁଅ ଓ ଡିଅକ୍ ଅନୁପାତ 4 : 3 । ବିଦ୍ୟାଳୟରୁ କେତେ ଜଣ ଡିଅକ୍ ଛାତ୍ରି ବାଲିଯିବାରୁ ପୁଅ ଓ ଡିଅକ୍ ଅନୁପାତ 2 : 1 ହେଲା । ତେବେ କେତେ ଜଣ ଡିଅକ୍ ବିଦ୍ୟାଳୟ ପରିଚ୍ୟାଗ କଲେ?
 (A) 20 (B) 30 (C) 40 (D) 50

$$\frac{350}{x} = \frac{4}{3}$$

$$350 \times 3 = 4x$$

$$1050 = 4x$$

$$x = 262.5$$

$$\frac{350}{y} = \frac{2}{1}$$

$$350 = 2y$$

$$y = 175$$

ARITHMETIC

100. The difference of 90% and 83% of a number is 175. Then find out 99% of the number?

(A) 1426 (B) 1750 (C) 2475 (D) 2500

গোটিএ সংজ্ঞার 90% ও 83% মধ্যে অতির 175। তেবে সংজ্ঞাটির 99% কেতে ?

(A) 1426 (B) 1750 (C) 2475 (D) 2500

$$\begin{array}{r} 90\% \\ 83\% \\ \hline 7\% = 175 \\ \hline 1 \end{array}$$

(34) (expected)

$$1 - \frac{3}{5} = \frac{2}{5}$$

$$\begin{array}{r} \frac{2}{5} = 300 \\ \hline 100 \\ \hline 300 \times 5 = 1500 \end{array}$$

$$\begin{array}{r} 9x + 8x + 7x + 2x + x + 1x + 6 \\ \hline 25x + 16 \\ \hline 5 \\ \hline 5(2x + 4) \\ \hline 5x + 20 \\ \hline 5 \\ \hline 5x \\ \hline 30 : 30 \\ \hline 6 \times 5 : 6 \times 4 \\ \hline 250 : 5 : 4 \\ \hline 250 : 4 \\ \hline 250 \times 50 \\ \hline 12500 \\ \hline 20 - 10 \\ \hline 8.64 \\ \hline 11.76 \end{array}$$

200.00	-U
800.00	-D
1000.00	-AC
500.00	-B
<hr/>	
3500.00	
3000.00	
6500.00	
1000.00	
<hr/>	
7500.00	-W

$$\begin{array}{r} 4hr 20 \times \frac{2}{5} \\ \hline 100 \end{array}$$

$$\begin{array}{r} 4hr 20 \times 2 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 8hr 40min \times \frac{20}{100} \\ \hline 100 \end{array}$$

$$\begin{array}{r} 480 min \\ \hline 40 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 480 \\ \hline 40 \\ \hline 12 \\ \hline 0 \\ \hline 12 \end{array}$$

$$10 \times 2$$

$$\boxed{5-1=4}$$

$$\begin{array}{r} 2 \\ \hline 50 \end{array} \times 10^2$$

$$10 \times 5 = 50$$

$$12 \times 4 = 48$$

$$\hline (2) = -300$$

$$\begin{array}{r} 54 \\ 39 \\ 45 \\ 175 \\ \hline 11. \\ \hline 12 \\ \hline 240 \\ \hline 40 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 17 \\ 25 \\ 144 \\ 18 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 17 \\ 25 \\ 324 \\ 18 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 17 \\ 25 \\ 160 \\ 150 \\ \hline 100 \\ 0 \end{array}$$

$$\begin{array}{r} 80 \\ 3 : 5 + 10 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 14 = 196 \\ \hline 196 \\ \times 14 \\ \hline 784 \\ 196 \\ \hline 2744 \end{array}$$

$$\begin{array}{r} 144 \\ 12 \\ 1728 \\ \hline 45 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 97 \\ 6 \\ 3 \times 14 \\ \hline -42 \\ \hline 1250 \\ \hline 15625 \end{array}$$